

Claims:

1. An optical subassembly for coupling with an optical connector, the optical subassembly comprising:

an optical sleeve defining a fixing hole to hold the optical connector;

an optical element for transferring optical signals;

a lens holder connected with the optical sleeve, the lens holder comprising a cavity receiving the optical element therein, a protuberance coupling in the fixing hole of the optical sleeve, and a lens member, the lens member being disposed between the optical element and the optical connector to converge light beams from the optical element.

2. The optical subassembly as described in claim 1, wherein the optical sleeve is integrally formed as a single piece, and the fixing hole includes a positioning portion for retaining the optical connector therein.

3. The optical subassembly as described in claim 1, wherein the optical sleeve is integrally formed as a single piece, the fixing hole includes a positioning portion for retaining the optical connector therein, and further includes an engaging portion for fittingly receiving the protuberance of the lens holder therein.

4. The optical subassembly as described in claim 3, wherein the positioning portion and the engaging portion are cylindrical and coaxial with each other.

5. The optical subassembly as described in claim 1, wherein the optical connector, the lens member and the optical element are all coaxial with one another.

6. The optical subassembly as described in claim 1, wherein the protuberance, the lens member and the cavity are all coaxial with one another.

7. The optical subassembly as described in claim 1, wherein the lens holder is

made of transparent material.

8. The optical subassembly as described in claim 1, wherein the protuberance includes a surface adapted to abut an end surface of the optical connector.
9. An optical subassembly for coupling with an optical connector, the optical subassembly comprising:
 - an optical sleeve defining a fixing hole to hold the optical connector therein;
 - an optical element for transferring optical signals; and
 - a lens holder receiving the optical element therein, the lens holder including a protuberance and a lens member integrally formed, the protuberance connecting with the optical sleeve, the lens member being coaxially aligned between the optical connector and the optical element to converge light beams passing therebetween.
10. The optical subassembly as described in claim 9, wherein the optical sleeve is integrally formed as a single piece, and the fixing hole includes a positioning portion for retaining the optical connector therein.
11. The optical subassembly as described in claim 9, wherein the optical sleeve is integrally formed as a single piece, the fixing hole includes a positioning portion for retaining the optical connector therein, and further includes an engaging portion for fittingly receiving the protuberance of the lens holder therein.
12. The optical subassembly as described in claim 11, wherein the positioning portion and the engaging portion are cylindrical and coaxial with each other.
13. The optical subassembly as described in claim 9, wherein the lens holder is integrally formed as a single piece, and defines a cavity for receiving the

optical element.

14. The optical subassembly as described in claim 13, wherein the protuberance, the lens member and the cavity are all coaxial with one another.
15. The optical subassembly as described in claim 9, wherein the lens holder is made of transparent material.
16. The optical subassembly as described in claim 9, wherein the protuberance includes a surface adapted to abut an end surface of the optical connector.
17. An optical subassembly comprising:
 - an optical sleeved defining a fixing hole for receiving an optical connector;
 - a lens holder defining a cavity receiving an optical element therein;
 - a lens positioned in the lens holder and facing to said fixing hole; and
 - interengagement device formed on an interface between said optical sleeve and said lens holder for coupling said optical sleeve and said lens holder together; wherein said interengagement device and said lens are coaxially arranged with each other to allow light, from the lens toward the connector, to be transmitted therethrough.